

Geosci. Model Dev. Discuss., author comment AC1
<https://doi.org/10.5194/gmd-2021-372-AC1>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.

Reply on CEC1

Davide Zanchettin et al.

Author comment on "Effects of forcing differences and initial conditions on inter-model agreement in the VolMIP volc-pinatubo-full experiment" by Davide Zanchettin et al., Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-372-AC1>, 2021

Dear Editor,

thank you for your comment, which stimulates us to provide additional details about the models used in our study and clarify the availability of data during the revision process.

All six models used in our study are in their exact CMIP6 version as employed for the CMIP6-endorsed initiative VolMIP. Some model descriptions are available in the es-doc:

<https://explore.es-doc.org/cmip6/models/ipsl/ipsl-cm6a-lr>

<https://explore.es-doc.org/cmip6/models/miroc/miroc-es2l>

<https://explore.es-doc.org/cmip6/models/mohc/ukesm1-0-ll>

Information about the output data for each model can be found at the following doi links at the WDCC Data Portal CERA, that also provide details and references for all models:

MPI-ESM-1.2-LR: doi:10.22033/ESGF/CMIP6.742

CanESM5: doi:10.22033/ESGF/CMIP6.1303

MIROC-ES2L: doi:10.22033/ESGF/CMIP6.902

IPSL-CM6-LR: doi:10.22033/ESGF/CMIP6.1534

GISS-E2.1-G: doi:10.22033/ESGF/CMIP6.1400

UKESM1: doi:10.22033/ESGF/CMIP6.1569

In the revision of the manuscript, we will improve the description of all models, add relevant information about the exact version of each model that was used for CMIP6-VolMIP and provide a code availability statement for each model in the exact version employed.

The raw data used in this study are part of the output of CMIP6, hence they are available through the ESGF for both the piControl and the volc-pinatubo-full experiments. As stated

in our manuscript, to facilitate the revision process and the public discussion of our manuscript we have provided the spatially-average data we have calculated from the gridded monthly output of each model in a long-term archive at: <https://vesg.ipsl.upmc.fr/thredds/catalog/VOLMIP/volc-pinatubo-full/catalog.html>

Sincerely,

Davide Zanchettin on behalf of all coauthors